81008

GENERAL INFORMATION

SHIP: R/V GYRE ~~81-G-5~~ (LEG II) 81-G-6-2 Gye logbook may have identified this cruise as 81-G-6.

AREA OF OPERATION: Mississippi - Louisiana Shelf

DATES OF OPERATION: 4/~~6~~18/81 to 4/28/81

PERSONNEL: Leg II
Chief Scientist: Ron Miller - USGS - CC
Jack Kindinger - USGS - CC
Linda Massingill - USGS - CC
Ronnie Wells - USGS - CC
Betty Reed - USGS - CC
Chuck Stelting - USGS - CC
Doug Owens - USGS - CC
Barry Irwin - USGS - Woods Hole
Jim Dodd - USGS - Woods Hole
Dave Mason - " "
Ken Parolski - " "
Dave Nichols - " "

PURPOSE: Collection of high resolution seismics to produce a hazard map and geologic interpretation of study area

MAJOR EQUIPMENT: Minisparker, 3.5KHZ, 12KHZ, Air Gun

NAVIGATION: Integrated system

DATA ACQUIRED: 3000 km high resolution seismics, 64 grab samples, 80 drift bottles stations, 150 km magnetics and gravity.

G – GEOLOGY GEOPHYSICS

GL MEASUREMENTS MADE AT A SPECIFIC LOCATION	NUMBER	i	l	FORMAT
G01 Dredge				
G02 Grab	64			
G03 Core rock *(no. of cores)*				
G04 Core–soft bottom *(no. of cores)*				
G05 Sampling by divers				
G06 Sampling by submersible				
G07 Drilling				
G08 Bottom photography				
G09 Sea floor temperature *(≤ 1 m from bottom)*				
G10 Accoustical properties of the sea floor				
G11 Engineering properties of the sea floor				
G12 Magnetic properties of the sea floor				
G13 Gravimetric properties of the sea floor				
G14 Radioactivity measurements				
G70 Other measurements				

GU MEASUREMENTS UNDERWAY				
G21 Motion picture of sea floor *(No. of nautical miles)*				
G22 Bathymetry-wide beam *(no. of nautical miles)*				
G23 Bathymetry-narrow beam *(no. of nautical miles)*	1,690			
G24 Side scan sonor *(no. of nautical miles)*				
G25 Seismic reflection *(no. of nautical miles)*	1,600			
G26 Seismic refraction *(no. of nautical miles)*				
G27 Gravimetry	90			
G28 Magnetism	90			
G29 Other measurements				

GS TYPES OF STUDIES	NUMBER			F
G31 Physical analysis of sediments				
G32 Chemical analysis of sediments				
G33 Paleothermy				
G34 Paleomagnetism and rock magnetism				
G35 Paleontology				
G36 Geothermy				
G37 Geochronology				
G38 Mineral and fossil resources				
G39 Litteral zone studies				
G90 Other measurements				

D – DYNAMICS

D01 Current meters *(no. of stat.)*				
D02 Current meters *(Average duration of measurement days)*				
D03 Currents measured from ship drift				
D04 GEK				
D05 Drifters *(number)*				
D06 Swallow floats *(number)*				
D07 Drift cards *(no. released)*		240		
D08 Bottom drifters *(no. released)*				
D09 Tidal observation *(duration)*				
D10 Sea and swell *(no. of observations)*				
D90 Other measurements				

M – METEOROLOGY

M01 Upper air observations				
M02 Incident radiation				
M03 Air–sea interface studies				
M04 Ice observations				
M05 Occasional standard measurements				
M06 Systematic standard measurements				
M90 Other measurements				

NOAA FORM 24-23
(1-76)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE
NATIONAL OCEANOGRAPHIC DATA CENTER

A00 DATA CENTER

OCEANOGRAPHY – GENERAL CRUISE INVENTORY
(ROSCOP – II)

A40 REFERENCE NUMBER

A01 EXPEDITION/PROJECT

A11 CRUISE NUMBER OR NAME
~~Gyre 81-5~~ 81-G-5

A02 SHIP OR PLATFORM
R/V Gyre

A12 PLATFORM TYPE

A03 COUNTRY
United States

A04 ORGANIZATION
U.S. Geologic Survey

	YES	NO	PART	
A91 Declared national program?	X			
A81 Exchange restricted?		X		
A92 Co-operative program?	X			A72 NAME
A82 Co-ordinated internationally?		X		A62 BY WHOM

A05 CHIEF SCIENTIST(S)
Leg 1:Arnold Bouma Leg 2: Ron Miller

A06 NAME AND ADDRESSES OF ORGANIZATIONS AND PERSONS WHOM TO QUERY

A1 Arnold Bouma – USGS
B1 Box 6732
Corpus Christi, TX 78411
C1
D1
E1

FINAL DISPOSITION OF DATA

A2
B2
C2
D2
E2

DATE	DAY	MONTH	YEAR
A07 FROM	06	04	81
A17 TO	28	04	81

A08 GENERAL OCEAN AREAS
Louisiana – Mississippi Shelf; Mississippi Fan; Northern Gulf Mexico Banks

A09 TYPE(S) OF MARINE ZONE(S)
07

GEOGRAPHIC AREA
If all data were collected at a fixed station, fill in the co-ordinates

A10 LATITUDE ° ' '' N/S

A20 LONGITUDE ° '' E/W

A15 FEDERAL SUPPORT

A25 REMARKS

Data Acquired: approximately 3000 km

1. Air Guns (40 in^3, 5 in^3, 1 in^3
2. Minisparker
3. 3.5 khz
4. 12 khz

150 km – magnetometer, gravimeter, 3.5 khz, 12 khz
64 grab samples
80 current drift bottle stations

DISCIPLINE AND TYPE OF MEASUREMENTS	Index 10° x 10° Qc	L	G	G	INDEX 1° x 1°
A G 23 B	7	2	0	8	
G 25	7	2	0	8	
A D07 B	7	2	0	8	
A G02 B	7	2	0	8	
A G 27 B	7	2	0	9	
A G 28 B	7	2	0	9	
A G 23 B	7	2	0	9	

DISCIPLINE AND TYPE OF MEASUREMENTS	Index 10° x 10° Qc	L	G	G	INDEX 1° x 1°
A B					
A					
A B					
A B					
A B					
A B					
B					

CRUISE REPORT

Ship Name: R/V GYRE	Operating Inst.: TAMU	Days at sea: 12	Days in Port:
Cruise No.: GYRE 81-5 Leg 1	Dates: April 6-17, 1981	Ship Costs Allocation Data	
Area of Operations: Gulf of Mexico - Mississippi-Louisiana Shelf	Port Calls: Place / Dates	Days Charged	Agency Charged / Grant/Contract No.

Projects Carried Out During Cruise

Project Title and Principal Investigator	Sponsoring Agency	Grant/Contract No.	Participating Personnel (As coded on reverse side)
Primary Projects: Louisiana ~~Alabama~~ Mississippi OCS			
Ancillary Projects			

Brief Narrative Description of Cruise and Scientific Results:

There were 1500 km. of good quality high resolution seismics, 18 grab samples ~~40~~ drift bottles stations, and 75 km of magnetics and gravity.

Arnold Bouma (Roy)
Chief Scientist

Date

Institution Official

Date

Type of Observations	No. of Stas. or Observs.	Type of Observations	No. of Stas. or Observs.
Rock Dredge		Underway sfc. temperature	
Grab sampler	18	Underway sfc. salinity	
Piston Corer		Standard hydro station	.
Gravity Corer		STD/CTD	.
Box Corer		XBT	.
Bottom Photography		Optical Measurements	
Seabed engineering studies		Acoustics measurements	
Magnetics	75 Km	Bottom Trawls	
Gravity	75 Km	Zooplankton tows	.
Bathymetry	1500 Km	Phytoplankton tows	.
Subbottom profiling	1500 Km	Neuston tows	.
Side-scan sonar		Dip-net collections	
Current meter		Midwater trawls	.
Drift cards or bottles	40	Chlorophyll measurements	
Drogues		Primary product. measuremts.	.
Swallow floats		Secchi discs	.
Dye dispersal measurements		Transmissometer meas.	.
Tide gauge measurements		Interstitial water meas.	.
Bottom pressure gauges		Suspended matter meas.	.
Sea/Swell observations		Scientific diving	.
Meteorological observations		Research submersible opers.	

(mark "c" if observations were taken continuously)

Analyses		Analyses	
Salinity		Trace elements	
Oxygen	.	Radioactivity	
Phosphorous	.	Dissolved gases	.
Nitrogen	.	Hydrocarbons	.
Silicon	.	Suspended matter	.
pH	.	Particulate carbon	.
Alkalinity	.	Dissolved org. carbon	.
Interstitial analyses	.		

Other observations or analyses:

SCIENTIFIC PERSONNEL ABOARD

Name:	Title:	Affiliation:
1. Arnold Bouma	Chief Sci. Geologist	USGS - Corpus
2. Ron Miller	Oceanographer	USGS - CC
3. Jack Kindinger	Oceanographer	USGS - CC
4. Linda Massingill	Geologist	USGS - CC
5. Ronnie Wells	Geologist	USGS - CC
6. Betty Reed	Typist	USGS - CC
7. John West	Electrical Tech.	USGS - CC
8. Rusty Tirey	Chief of Operations	USGS - Woods Hole
9. Bob Bowles	Navigator	USGS - WH
10. Barry Irwin	Navigator	USGS - WH
11. Jim Dodd	Navigator	USGS WH
12. Dave Masan	Electrical Tech	USGS - WH
13. Ken Parolski	Electrical Tech	USGS - WH
14. Dave Nichols	Electrical Tech	USGS - WH
15. Larry Handley	Geologist	BLM - New Orleans
16.		
17.		

CRUISE REPORT

TAMU--11/77

Ship Name: R/V GYRE	Operating Inst.: TAMU	Days at sea: 11	Days in Port:
Cruise No.: GYRE 81-5 LEG 2	Dates: April 18-28, 1981	Ship Costs Allocation Data	

Area of Operations:	Port Calls: Place	Port Calls: Dates	Days Charged	Agency Charged	Grant/Contract No.
Gulf of Mexico -- Mississippi - Louisiana Shelf					

Projects Carried Out During Cruise

Project Title and Principal Investigator	Sponsoring Agency	Grant/Contract No.	Participating Personnel (As coded on reverse side)
Primary Projects: Louisiana ~~Alabama~~ - Mississippi OCS			
Ancillary Projects			

Brief Narrative Description of Cruise and Scientific Results:

There were 1500 km of good quality high resolution seismics, 46 grab samples, 40 drift bottle stations, and 75 km of magnetics and gravity.

Ron Miller
Chief Scientist

Date

Institution Official

Date

Type of Observations	No. of Stas. or Observs.	Type of Observations	No. of Stas. or Observs.
Rock Dredge		Underway sfc. temperature	
Grab sampler	46	Underway sfc. salinity	
Piston Corer		Standard hydro station	
Gravity Corer		STD/CTD	
Box Corer		XBT	
Bottom Photography		Optical Measurements	
Seabed engineering studies		Acoustics measurements	
Magnetics	75 Km	Bottom Trawls	
Gravity	75 Km	Zooplankton tows	
Bathymetry	1500 Km	Phytoplankton tows	
Subbottom profiling	1500 Km	Neuston tows	
Side-scan sonar		Dip-net collections	
Current meter		Midwater trawls	
Drift cards or bottles	40	Chlorophyll measurements	
Drogues		Primary product. measuremts.	
Swallow floats		Secchi discs	
Dye dispersal measurements		Transmissometer meas.	
Tide gauge measurements		Interstitial water meas.	
Bottom pressure gauges		Suspended matter meas.	
Sea/Swell observations		Scientific diving	
Meteorological observations		Research submersible opers.	

(mark "c" if observations were taken continuously)

Analyses		Analyses	
Salinity		Trace elements	
Oxygen		Radioactivity	
Phosphorous		Dissolved gases	
Nitrogen		Hydrocarbons	
Silicon		Suspended matter	
pH		Particulate carbon	
Alkalinity		Dissolved org. carbon	
Interstitial analyses			

Other observations or analyses:

SCIENTIFIC PERSONNEL ABOARD

Name:	Title:	Affiliation:
1. Ron Miller	Chief Scientist-Oceanographer	USGS-Corpus Christi
2. Jack Kindinger	Co-Chief Sci. Oceanographer	USGS-CC
3. Linda Massingill	Geologist	USGS-CC
4. Ronnie Wells	Geologist	USGS-CC
5. Betty Reed	Typtist	USGS-CC
6. Chuck Stelting	Phy. Sci. Tech.	USGS-CC
7. Doug Owens	Phy. Sci. Tech	USGS-CC
8. Barry Irwin	Navigator	USGS-Woods Ho
9. Jim Dodd	Navigator	USGS-WH
10. Dave Mason	Electrical Tech	USGS-WH
11. Ken Parolski	Electrical Tech	USGS-WH
12. Dave Nichols	Electrical Tech	USGS-WH
13.		
14.		
15.		
16.		
17.		
18.		